

Appalachian Tiger Beetle

Cicindela ancocisconensis

Federal Listing	N/A
State Listing	
Global Rank	G3
State Rank	S1
Regional Status	high



Photo by Pamela Hunt

Justification (Reason for Concern in NH)

Considered declining but not imperiled by NatureServe. Mawdsley (2007) found this species widespread and often common along the Saco and Ammonoosuc Rivers in 2004 and 2006, and suggests that it may be less rare than generally perceived. However, Schlesinger and Novak (2011) failed to find it in over two thirds of historic sites in New York, and in only 10% of other suitable sites within the potential range in that state. It appears extirpated or nearly so from the Ohio River valley (Pearson et al. 2006, Mawdsley 2007). Apparently declining/not relocated in VT (VT WAP).

Distribution

The Appalachian Tiger Beetle occurs from Quebec to Georgia, with historic records west along the Ohio River to Indiana (Leonard and Bell 1999, Pearson et al. 2006). It appears most abundant in the northernmost portion of this range in northern New England (White Mountains) and adjacent areas. In NH it is known from several localities in Coos, Grafton, and Carroll counties, and at least historically from near Mount Sunapee (Dunn 1981).

Habitat

The Appalachian Tiger Beetle occurs along cool rocky rivers and streams. Occupied sites tend to have some combination of sand interspersed with rocks, often with more vegetation than sites used by other beach-using tiger beetles (Leonard and Bell 1999, Pearson et al. 2006, Mawdsley 2007). Larvae burrow into sand among rocks above the normal high-water line, and adults forage throughout exposed habitat.

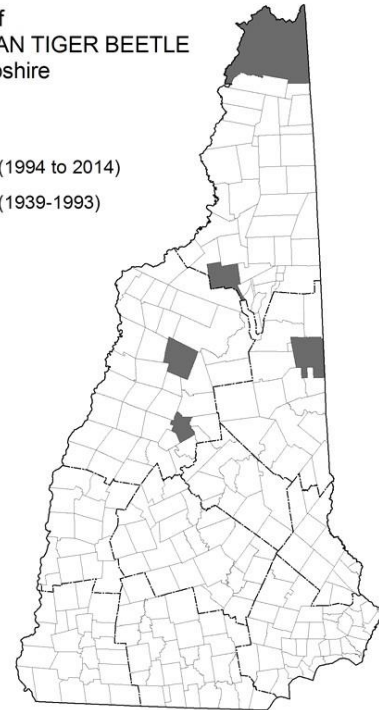
Appendix A: Insects

NH Wildlife Action Plan Habitats

- Warmwater Rivers and Streams
- Coldwater Rivers and Streams

Distribution of
APPALACHIAN TIGER BEETLE
in New Hampshire

■ Current (1994 to 2014)
■ Historic (1939-1993)



Distribution Map

Current Species and Habitat Condition in New Hampshire

Unknown, but Mawdsley (2007) found this species widespread and often common along the Saco and Ammonoosuc Rivers in 2004 and 2006, and suggests that it may be less rare than generally perceived. However, Schlesinger and Novak (2011) failed to find it in over two thirds of historic sites in New York, and in only 10% of other suitable sites within the potential range in that state. It appears extirpated or nearly so from the Ohio River valley (Pearson et al. 2006, Mawdsley 2007). Apparently declining/not relocated in VT (VT WAP).

Population Management Status

Not managed

Regulatory Protection (for explanations, see Appendix I)

- Rivers Mngmt and Protection Program - NHDES

Quality of Habitat

Unknown

Habitat Protection Status

Likely highly variable, and dependent upon ownership of abutting uplands

Appendix A: Insects

Habitat Management Status

Variable depending on ownership

Threats to this Species or Habitat in NH

Threat rankings were calculated by groups of taxonomic or habitat experts using a multistep process (details in Chapter 4). Each threat was ranked for these factors: Spatial Extent, Severity, Immediacy, Certainty, and Reversibility (ability to address the threat). These combined scores produced one overall threat score. Only threats that received a “medium” or “high” score have accompanying text in this profile. Threats that have a low spatial extent, are unlikely to occur in the next ten years, or there is uncertainty in the data will be ranked lower due to these factors.

There were no threats ranked high or medium for this species.

List of Lower Ranking Threats:

Habitat degradation from proactive and reactive flood control or erosion control

Mortality from recreational use that tramples larval burrows

Habitat degradation and mortality from increased flooding

Actions to benefit this Species or Habitat in NH

Appalachian Tiger Beetle surveys

Specific Threat (IUCN Threat Levels): None

Specific Action: Research, survey or monitoring - fish and wildlife populations

Objective:

Determine the current distribution and abundance of this species in NH

General Strategy:

Survey areas of suitable habitat statewide so as to determine current distribution

Political Location:

Statewide

Watershed Location:

Location Description:

Primarily from White Mountains north

References, Data Sources and Authors

Data Sources

Leonard and Bell 1999; Pearson et al. 2006; Mawdsley 2007; Dunn 1981; P. Hunt, unpublished data; UNH insect collection. Most recent NH surveys by Mawdsley (2007), but limited to gross distribution vs. condition.

Appendix A: Insects

Data Quality

Given limited survey effort and sometimes difficult access to this species' habitat, it is likely underreported. It is superficially similar to the more widespread *C. repanda*, which may also complicate accurate reporting. No data on condition

2015 Authors:

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2005 Authors:

Literature

Dunn, G.A. 1981. Tiger beetles of New Hampshire. *Cicindela* 13: 1-28.

Leonard, J.G., and R.T. Bell. 1999. Northeastern Tiger Beetles: A field guide to tiger beetles of New England and eastern Canada. CRC Press, Boca Raton, FL.

Mawdsley, J.R. 2007. Comments on the conservation status of the tiger beetle *Cicindela ancocisconensis* T.W. Harris (Coleoptera: Carabidae: Cincindelinae). *Proceedings of the Entomological Society of Washington* 109: 721-724.

Pearson, D.L., C.B. Knisley, and C.J. Kazilek. 2006. A field guide to the tiger beetles of the United States and Canada. Oxford University Press, New York.

Schlesinger, M.D., and P.G. Novak. 2011. Status and conservation of an imperiled tiger beetle fauna in New York State, USA. *Journal of Insect Conservation* DOI: 10.1007/s10841-011-9382-y